CONTRACT NNL04AA10B
(Contract)

The following information has been determined to be exempt from disclosure and has been deleted from the contract:

- Exhibit B – Safety and Health Plan

The Safety and Health Plan is replete with proprietary information and because there are no reasonably segregable portions that are subject to release, this plan is being withheld in its entirety.

The deleted material is exempt from disclosure under 14 C.F.R. 1206.300(b)(4) which covers trade secrets and commercial or financial information obtained from a person and privileged and confidential information. It has been held that commercial or financial material is "confidential" for purposes of this exemption if its disclosure would be likely to have either of the following effects: (1) impair the Government's ability to obtain necessary information in the future; or (2) cause substantial harm to the competitive position of the person from whom the information was obtained, National Parks and Conservation v. Morton, 498 F2d 765 (D.C. Cir. 1974).

SOLICITATION, OFFER AND AWAR	1. THIS CONTRACT IS A RATED ORDER UNDER DPAS (15 CFR 350)	R :G	PAGE 1 OF 100

2. CONTRACT NO.	3. SOLICITATION NO.	4. TYPE OF SOLICITATION	5. DATE ISSUED	6. REQUISITION/PURCHASE NO.
NNL04AA10B	1-LDI-4200024660	☐ SEALED BID (IFB) ☒ NEGOTIATED (RFP)	2/6/04	4200024660

7. ISSUED BY	CODE	8. ADDRESS OFFER TO *(If other than Item 7)*
Nasa Aeronautics And Space Administration Langley Research Center Hampton, VA 23681		9A Langley Boulevard, Building 1195B, Room 105 NASA Langley Research Center Hampton, VA 23681-2199

NOTE: In sealed bid solicitations "offer" and "offeror" mean "bid" and "bidder"

SOLICITATION

9. Sealed offers in original and **10** copies for furnishing the supplies or services in the Schedule will be received at the place specified in Item 8, or if handcarried, in the depository located in 9A Langley Blvd., Bldg 1195B, Room 105 until **4:00 p.m.** local time, on **3-8-04** *(date)*.
CAUTION - LATE Submissions, Modifications, and Withdrawals: See Section L,. Provision No. 52.214-7 or 52.215-1. All offers are subject to all terms and conditions contained in this solicitation.

10. FOR INFORMATION CALL:	A. NAME	B. TELEPHONE NO. *(NO COLLECT CALLS)* AREA CODE	NUMBER	EXT.	C. EMAIL ADDRESS
	Tianda M. Sherrell	**(757)**	**864-3640**		**Tianda.M.Sherrell@nasa.gov**

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OFFER ***(Must be fully completed by offeror)***

NOTE: Item 12 does not apply if the solicitation includes the provisions at 52.214-16, Minimum Bid Acceptance Period.

12. In compliance with the above, the undersigned agrees, if this offer is accepted within calendar days *(60 calendar days unless a different period is inserted by the offeror)* from the date for receipt of offers specified above, to furnish any or all items upon which prices are offered at the price set opposite each item, delivered at the designated point(s), within the time specified in the schedule.

13. DISCOUNT FOR PROMPT PAYMENT *(See Section I, clause No. 52-232-8)*	10 CALENDAR DAYS	20 CALENDAR DAYS	30 CALENDAR DAYS	CALENDAR DAYS
	0 %	0 %	0 %	0 %

14. ACKNOWLEDGMENT OF AMENDMENTS *(The offeror acknowledges receipt of amendments to the SOLICITATION).*	AMENDMENT NO	DATE	AMENDMENT NO	DATE
	1	02-07-2004	2	02-09-2004
For offerors and related documents numbered and dated:	3	02-13-2004	4	02-20-2004

15. NAME AND ADDRESS OF OFFEROR	CODE	3Y798	FACILITY	16. NAME AND TITLE OF PERSON AUTHORIZED TO SIGN OFFER *(Type or print)*
	Analytical Services & Materials, Inc. 107 Research Drive, Hampton, Virginia 23666			**Jalaiah Unnam, Ph.D.**

15B. TELEPHONE NO. *(Include area code)*	15C. CHECK IF REMITTANCE ADDRESS IS DIFFERENT FROM ABOVE – ENTER ☐ SUCH ADDRESS IN SCHEDULE	17. SIGNATURE	18. OFFER DATE
(757) 865-7093 ext. 306		Jalaiah Unnam	**July 13, 2004**

AWARD ***(To be completed by Government)***

19. ACCEPTED AS TO ITEMS NUMBERED	20. AMOUNT	21. ACCOUNTING AND APPROPRIATION
	SEE SECTION B.2	4200080856 $25,000.00

22. AUTHORITY FOR USING OTHER THAN FULL AND OPEN COMPETITION	23. SUBMIT INVOICES TO ADDRESS SHOWN IN: *(4 copies unless otherwise specified)*	ITEM
☐ 10 U.S.C. 2304(c) ( ) ☐ 41 U.S.C. 253(c) ( )		G.2

24. ADMINISTERED BY *(If other than Item 7)* CODE	25. PAYMENT WILL BE MADE BY CODE
National Aeronautics & Space Administration Langley Research Center 9A Langley Blvd., Bldg 1195A, Rm 230 Hampton, VA 23681-2199	NASA Langley Research Center Financial Management, Accounts Payable M/S 175 Hampton, VA 23681-2199

26. NAME OF CONTRACTING OFFICER *(Type or print)*	27. UNITED STATES OF AMERICA	28. AWARD DATE
Mary Jane Yeager	Mary Jane Yeager *(Signature of Contracting Officer)*	AUG 20 2004

IMPORTANT – Award will be made on this Form, or on Standard Form 26, or by other authorized official written notice.

PART I - THE SCHEDULE
SECTION B - SUPPLIES OR SERVICES AND PRICE/COSTS

B.1 SUPPLIES AND/OR SERVICES TO BE FURNISHED

Except as may be expressly stated in the task orders as furnished by the Government, the Contractor shall provide all resources as specified in Task Orders issued pursuant to Clause H.10, Task Ordering Procedure, that are necessary to perform the requirements delineated in the Section C, Statement of Work.

B.2 MINIMUM AND MAXIMUM INDEFINITE DELIVERY, INDEFINITE QUANTITY (IDIQ) CONTRACT VALUE

The guaranteed minimum quantity of work which will be required under this contract, and which will be initiated through the issuance of task orders, shall be $100,000. There will be no further obligation on the part of the Government to issue additional task orders thereafter. The total maximum value is $39 million for the 5-year period of performance (total of all multiple award contracts).

B.3 ESTIMATED COST AND FIXED FEE

The estimated cost and fixed fee of the contract is the sum of the estimated costs and fixed fee set forth for individual Task Orders issued by the Government pursuant to H.10, Task Ordering Procedure.

B.4 CONTRACT FUNDING

(a) For purposes of payment of cost, exclusive of fee, in accordance with the Limitation of Funds clause, the total amount allotted by the Government to this contract is the amount set forth in Task Orders. This allotment is for the performance of work in accordance with the limitations and completion dates as set forth in task orders authorized by the Contracting Officer.

(b) An additional amount is obligated under each Task Order for payment of fee.

(c) The Limitation of Funds Clause FAR 52.232-22 (APR 1984) applies at the Task Order level.

SECTION C – STATEMENT OF WORK

STRUCTURES & MATERIALS AND AERODYNAMIC, AEROTHERMODYNAMIC & ACOUSTICS TECHNOLOGY FOR AEROSPACE VEHICLES

1.0 SCOPE AND OBJECTIVES

This contract is for Structures & Materials and Aerodynamic, Aerothermodynamic & Acoustics Technology for Aerospace Vehicles. The contractor shall furnish all personnel, facilities, equipment, material, supplies, and services, except as may be expressly set forth in the Contract task orders as Government furnished, and otherwise do all things necessary to, or incident to, perform and provide the work efforts described in this Section C. The contractor shall perform task orders that are issued by the Langley Research Center Contracting Officer. This contract may be used to support all NASA Centers that require work within the scope of this Section C.

2.0 Structures & Materials for Aerospace Vehicles

2.1 Structures & Materials Technology

Task orders will be written to support research and development in materials and structures technology related to aerospace vehicles, with emphasis in the research areas of mechanics and durability, structural dynamics, aeroelasticity, metals and thermal structures, analytical and computational methods, advanced materials and processing, and nondestructive evaluation sciences. Research and development in structures and materials technology may include the use of systems analysis to determine the potential benefits of different vehicle configurations including the potential benefits of utilizing various technologies on these different configurations.

2.1.1 Mechanics and Durability

The contractor shall conduct analytical and experimental research on the response of complex structures subjected to static and dynamic loads, explore basic behavior, develop advanced methods of analysis and design, and confirm validity of analysis by conducting tests of elements and large-scale structural models. Specifically, the contractor shall develop structurally efficient, cost-effective structural concepts that exploit the benefits of advanced composite and metallic materials for advanced aircraft and spacecraft structural components. The contractor shall investigate stability, strength, damage tolerance, and structural integrity of aircraft and spacecraft structures, and tailor structures made from composite materials. The contractor shall focus on the identification of structural deformations and failure modes, development of verified failure analysis, development of structurally efficient composite and metallic structural concepts, and prediction of nonlinear and linear structural response phenomena of undamaged and damaged structures subjected to mechanical and pressure loads. The contractor shall also develop and validate new static and dynamic test techniques including combined loads. The contractor shall conduct fundamental and applied research to develop the mechanics characterization of advanced materials for airframe and spacecraft structural applications where this characterization takes the form of mechanics-based mathematical models that provide the material descriptions required to predict the deformation, strength, and life of advanced materials in complex aerospace structures. The contractor shall investigate material in elasticity, anisotropy, time, and temperature dependence for the purpose of developing constitutive relationships. The contractor

shall develop continuum mechanics-based models to describe material strength when dominant cracks are not present. The contractor shall develop fracture mechanics-based failure methodologies to predict the residual strength of materials with dominant cracks to assess damage tolerant structural requirements. The contractor shall develop fatigue crack growth and life prediction methodologies to address damage tolerance requirements. The contractor shall develop the mechanics of the microstructural deformation and failure process. The contractor shall conduct structural concept trade studies.

2.1.2 Structural Dynamics

The contractor shall conduct analytical and experimental research for the purpose of developing and validating improved methods to predict, verify, and control complex aircraft and space structures dynamic responses, and to confirm the validity of approaches by conducting tests on full-scale structures, structural elements and scaled structural models. The contractor shall conduct research to improve the safety and handling performance of aircraft during all-weather ground operations, including takeoff, landing impact, and ground handling phenomena. The contractor shall conduct research to assess runway treatments and effects on aircraft and tire performance, as well as develop and validate new dynamic test techniques.

2.1.3 Aeroelasticity

The contractor shall study aeroelastic phenomena and prediction capabilities needed to apply new aerodynamics and structural concepts to future flight vehicles and to determine and solve the aeroelastic problems of current designs. The contractor shall develop and validate advanced control concepts that employ smart materials or aerodynamic control surfaces for suppressing aeroelastic response and alleviating loads and vibration. The contractor shall develop and validate advanced control concepts for ground testing simulations (including the conception, recommendation, and technical support), wind-tunnel tests, and flight experiments to validate the methodologies. The contractor shall develop and validate advanced control concepts including generation of mathematical models required to support NASA flight projects and perform studies to verify theoretical developments involving advanced control concepts. The contractor shall provide technical support in flutter prevention programs for new vehicles through analysis and aeroelastically scaled model tests.

2.1.4 Metals and Thermal Structures

The contractor shall conduct analytical and experimental research to study the behavior of complex structures subject to static and time-varying mechanical and thermal loads. The contractor shall investigate basic structural and thermal behavior, develop advanced methods of analysis and design, and verify performance by conducting thermal-structural experiments at the element, component, and large-scale test article level. The contractor shall also develop efficient structural concepts for future high-speed aircraft and space transportation systems that exploit the benefits of advanced composite and metallic materials by studying primary vehicle structural behavior, sizing and concept development, stress, stability and failure analysis, lightweight/durable thermal protection systems, reliable, safe, operable reusable cryogenic tank systems, cooled structural concepts, and thermal effects on structural behavior. The contractor shall conduct research on advanced light metal alloys and metal matrix composites for aerospace structural applications. The contractor shall conduct research on lightweight, high-strength structural alloys and composites to achieve improved thermal/mechanical performance through fundamental

analysis of metallurgical concepts and control of microstructural features. The contractor shall develop new or improved ingot and powder metallurgy alloys, composites, and protective coatings for enhanced mechanical properties, long-term thermal stability and environmental protection. The contractor shall explore innovative processing methods for fabricating near net shape and built-up structural components for low- and high-temperature applications on future aerospace vehicles. The contractor shall test and analyze structural elements to determine effects of processing on material properties and demonstrate the utility of advanced alloys and associated processes.

2.1.5 Analytical and Computational Methods

The contractor shall develop new and evolving computer hardware and software technology to conduct research in advanced computational methods for the design and response prediction of complex aerospace vehicles subject to static, dynamic and thermal loads. The contractor shall develop methods, which reduce design cycle time, manufacturing costs, and life cycle costs. These methods shall utilize the physics of structural mechanics, materials and multidisciplinary behavior and include design methods, which optimize cost, repair, and performance requirements of aircraft structural systems in a concurrent engineering environment. The contractor shall develop modeling methods for predicting composite and metallic component failure and integrity, global/local/micro response behavior, nonlinear structural response, finite element methods, optimization and integrated thermal and mechanical behavior. The contractor shall develop new equation solvers, eigenvalue extraction algorithms and stiffness and mass matrix assembly techniques to enable efficient and rapid solution on evolving computer systems; and validate analytical methods through experimentation.

2.1.6 Advanced Materials and Processing

The contractor shall conduct fundamental and applied research studies combining the disciplines of advanced polymer synthesis, composites, and adhesives processing science, and advanced characterization methodology to develop improved materials concepts for efficient aerospace structures. The contractor shall synthesize novel polymeric materials for applications such as matrices for fiber-reinforced composites, adhesives for bonding lightweight composite and metal structures, and high-performance films for spacecraft. The contractor shall conduct research studies regarding the evolution of methodologies for characterizing polymer molecular structure/property relationships and the effect of cure and environmental exposure on these relationships for these novel polymers and related composite materials. The contractor shall conduct investigations on processing variables for fabricating structural components for advanced composites and determine the effects of these variables on material properties. The contractor shall develop innovative processing methods for fabricating composite components for aircraft and spacecraft structures. The contractor shall analyze and test these composites to demonstrate potential improvements in fabrication. The contractor shall determine the extent and cause of environmental degradation of advanced structural materials in aircraft operating environments. The contractor shall develop materials concepts and processing methods affording damage-tolerant airframe primary structures at costs competitive with conventional engineering materials. The contractor shall determine long-term behavior of aircraft structural materials through ground-based environmental tests and flight service evaluation.

2.1.7 Nondestructive Evaluation Sciences

The contractor shall conduct research, develop, and apply advanced measurement techniques that relate quantitative nondestructive evaluation sciences to physical/engineering materials and structures characterization. These techniques include new applications using properties of ultrasound, acoustic emission, acoustic microscopy, magnetics, optics, radiography, fiber optics, computed tomography, and thermography. The contractor shall develop prototype instrumentation, systems, nondestructive evaluation and inspection techniques for materials and structures. These techniques should address advanced polymeric and metal matrix composites, carbon-carbon and ceramic materials, advanced metals, smart materials and structures for both the current and next generation subsonic, supersonic, and hypersonic aircraft structures and systems, shuttle systems, solid rocket motor structures, and testing in laboratory environments.

3.0 Aerodynamic, Aerothermodynamic & Acoustics Technology for Aerospace Vehicles

3.1 Aerodynamic, Aerothermodynamic & Acoustics Technology

Task orders will be written to support research and development in aerodynamics, aerothermodynamics, and acoustics technology related to aerospace vehicles, with emphasis in the research areas of configuration aerodynamics, computational modeling and simulation, flow physics and control, aircraft noise prediction and control, aerothermodynamics, hypersonic airbreathing propulsion, advanced measurement, diagnostics, and instrument systems, and model systems. The technology covers a wide variety of aerospace vehicles concepts that may include both Earth and other planetary flight applications. Vehicle configurations of interest may include traditional as well as non-traditional concepts. Vehicle flight speed regimes of interest may extend from subsonic through flight at hypersonic speeds. Research and development in these technical areas may include the use of systems analysis to determine the potential benefits of the various technologies.

3.1.1 Configuration Aerodynamics

The contractor shall conduct applied experimental and computational research focused on the development of advanced configuration concepts for all classes of fixed-wing aircraft at subsonic, transonic, and supersonic speeds. The contractor shall conceive and evaluate innovative aircraft plan-form shapes, control effectors, and propulsion system installations and assess the suitability for further development. This research shall include the development of an understanding of the flow physics and integrated aerodynamic characteristics associated with these classes of aircraft. The contractor shall perform assessments of vehicle performance at cruise, off-design, and high-lift conditions using experimental and computational methods. Occasional modification/adaptation of computational tools may be required for performing design and assessment of revolutionary and evolutionary air vehicle configurations. The contractor shall conduct studies to optimize all aspects of configuration external shape and to develop and use active and passive configuration shaping, active and passive flow control methods, thrust vectoring for control, and advanced propulsion system installations for improving performance, stability and control, and maneuverability. In addition, the contractor shall conduct studies also aimed at understanding and optimizing the mutual interference effects that exist between aircraft components such as the wing, fuselage, propulsion system, and external stores to significantly increase performance.

3.1.2 Computational Modeling and Simulation

The contractor shall develop computational methods that can be used to improve fundamental understanding of physics associated with the fluid mechanics and noise generation for complex airframe systems. The contractor shall conduct computational research in aerodynamics and acoustics with applications in all speed regimes, from subsonic to hypersonic flight. The contractor shall utilize the full range of mathematical equations for fluid dynamic and acoustics, including various levels of modeling that range from linearized to fully non-linear equations. The contractor shall conduct research in grid generation and fluid dynamics/aeroacoustic equation solution methods for both structured and unstructured grid topologies. In particular, the contractor shall perform advanced research aimed at the development and validation of steady and unsteady solutions to the Reynolds-Averaged Navier-Stokes equations. The contractor shall provide for the timely transfer of validated computer software to Langley researchers and organizations, including the creation and transfer of appropriate computer code documentation. The contractor shall develop new analytical and numerical methods and extensions of existing computational methods for the analysis and design of complex three-dimensional configurations, including the exploration of massively parallel and distributed workstation-class computers for affordable computations. The contractor shall also conduct research aimed at developing higher order accurate algorithms and improved boundary condition procedures for the prediction of aeroacoustic noise for advanced subsonic and supersonic aircraft. The contractor shall conduct both basic and applied research aimed at improving the physical understanding of advanced techniques and models for the prediction and control of turbulent flows, with an emphasis on the high Reynolds number flows encountered on full-scale aircraft configurations. The contractor shall also conduct computational methods research for a wide range of applications, including rapid and robust adaptive unstructured grid analysis and design methods, airframe noise prediction and control methods, turbulence and transition modeling and validation, and time-dependent flow fields for application to flow control device design, vehicle stability and control, and vehicle aeroelastic stability prediction.

3.1.3 Flow Physics and Control

The contractor shall conduct fundamental experimental and computational research to enhance the knowledge and understanding of the physics underlying boundary-layer transition, active and passive flow control, three-dimensional flow physics, turbulence, vortical and separated flows. The contractor shall apply this understanding in the development of advanced computational and analytical methods for the prediction of boundary-layer transition and in developing techniques for controlling viscous fluid flows. The contractor shall conduct experiments to obtain detailed flow field and surface data to validate Computational Fluid Dynamics (CFD) methods. The contractor shall apply advanced wind tunnel and experimental test techniques across the speed range from low subsonic to hypersonic speeds. The contractor shall transfer validated design tools and benchmark experimental data to NASA researchers and organizations.

3.1.4 Aircraft Noise Prediction and Control

The contractor shall conduct research aimed at understanding, predicting and controlling the noise of all classes of aircraft (including both fixed- and rotary-wing). The contractor shall conduct research to understand and control interior noise and its effects on aircraft, rotorcraft, and spacecraft structures, passengers, and crew. The contractor shall conduct research that includes fundamental, theoretical, analytical, and experimental components as well as applied efforts. The contractor shall conduct research on the fluid mechanics and acoustics of jets, nacelle and

fan noise, airframe noise, and propulsion/airframe aeroacoustics. The contractor shall conduct research to understand noise generation processes, to develop methods for predicting acoustics and flow fields and their interactions, and to identify and demonstrate noise reduction and control techniques. The contractor shall develop advanced active and passive interior noise control concepts for vehicles manufactured with conventional, advanced metallic, or composite materials. The contractor shall also conduct research to understand, predict, and control the response of vehicle structures of advanced metallic and composite materials to intense acoustic loads, for acoustic fatigue avoidance. The contractor shall conduct experimental research in anechoic facilities, laboratories, wind tunnels, and on vehicles in flight. The contractor shall develop noise-prediction computer software that ranges from analytical and CFD-based methods to empirical and semi-empirical aircraft systems and airport noise prediction methods.

3.1.5 Aerothermodynamics

The contractor shall conduct research to assesses, optimize, and benchmarks the national access-to-space and planetary entry vehicle concepts. The contractor shall develop new aerothermodynamic technologies to enable and enhance vehicle performance. The contractor shall conduct research to understand complex flowfield physics associated with aerospace vehicles. The contractor shall develop rapid, high fidelity computational/experimental tools required for vehicle assessment and technology advancement.

3.1.6 Hypersonic Airbreathing Propulsion

The contractor shall conduct multidisciplinary research to develop advanced technology for hypersonic airbreathing propulsion systems for aerospace vehicles. The focus of the research will be on airframe-integrated engine concepts having high performance over a wide range of flight Mach numbers. The contractor shall conduct research that develops and validates integrated multidisciplinary methods for design and analysis with both fundamental physics and phenomenological models including effects of turbulence, mixing, finite-rate reactions, fuel injection, and geometry on ignition, combustion and thrust performance across the speed regime from takeoff to orbital velocity. Innovative concepts for vehicle-integrated airbreathing-engines shall be developed and evaluated. The contractor shall predict complete airframe-engine performance characteristics for both ground-test and flight-test conditions using experimentally verified analysis methods. Innovative experimental techniques and diagnostics shall be developed for application in tests of airframe-integrated engines in ground test facilities. The contractor shall utilize appropriate test data, or conduct tests of complete subscale and large-scale engines, to assess and to improve integrated engine and aero-thermo-structural performance.

3.1.7 Advanced Measurement, Diagnostics and Instrument Systems

The contractor shall conduct research and development of experimental measurement and sensing techniques for aerospace research applications. Utilizing expertise ranging from analytical chemistry to optical physics to advanced sensors and actuators, the contractor shall develop advanced micro-electro-mechanical systems (MEMS) sensors and nanosensors and the associated electronics. The contractor shall conduct research aimed at discovering and developing radical new techniques to allow the measurement and quantification of the aerodynamic properties associated with advanced vehicle concepts. The contractor shall demonstrate the ability to conduct research for a large variety of applications, including non-intrusive optical measurement techniques of wind tunnel model state, global flow diagnostic measurement techniques for velocity,

temperature and pressure measurements, intelligence frameworks for large sensor arrays, and time-dependent sensing methods.

3.1.8 Model Systems

The contractor shall perform research to develop state of the art test-articles, electro-mechanical instrumentation systems that enable achievement of NASA's research and development goals. The contractor shall perform applied research for development of sub-scaled flying vehicles, electromechanical systems and discrete measurement systems using systems engineering theory to insure the complete integration of complex hardware and instrument systems. The contractor shall conduct research to assess and improve current capabilities for scaled model systems. The contractor shall develop model systems for a variety of applications, including morphing and dynamic control for test articles, cycle time reduction efforts and characterization and integration of sensors (strain, force and angle-of-attack).

4.0 Integration

The contractor shall conduct research and development for the integration of structures and material technologies with aerodynamic, aerothermodynamic & acoustics technologies. The contractor shall provide detailed systems analysis for both revolutionary and evolutionary vehicle concepts including evaluating the relative merits of individual technologies within a vehicle system. This capability shall include the ability to assess multidisciplinary implications (aerodynamics, noise, structures, observables, etc.) of evolutionary and revolutionary vehicle concepts and advanced technology integration into those concepts.

SECTION D - PACKAGING AND MARKING

D.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE

None included by reference.

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE

None included by reference.

SECTION E - INSPECTION AND ACCEPTANCE

E.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.246-8	MAY 2001	INSPECTION OF RESEARCH AND DEVELOPMENT--COST-REIMBURSEMENT

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE

E.2 HIGHER-LEVEL CONTRACT QUALITY REQUIREMENT (FAR 52.246-11) (FEB 1999)

The Contractor shall comply with the higher-level quality standard selected below.

Title	Number	Date
ANSI/ISO/ASQC Q	ISO 9001	

[NOTE: This clause applies only when the deliverable is other than a report.]

E.3 MATERIAL INSPECTION AND RECEIVING REPORT (NFS 1852.246-72) (AUG 2003)

(a) At the time of each delivery to the Government under this contract, the Contractor shall furnish a Material Inspection and Receiving Report (DD Form 250 series) prepared in 5 copies, an original and 4 copies.

(b) The Contractor shall prepare the DD Form 250 in accordance with NASA FAR Supplement 1846.6. The Contractor shall enclose the copies of the DD Form 250 in the package or seal them in a waterproof envelope, which shall be securely attached to the exterior of the package in the most protected location.

(c) When more than one package is involved in a shipment, the Contractor shall list on the DD Form 250, as additional information, the quantity of packages and the package numbers. The Contractor shall forward the DD Form 250 with the lowest numbered package of the shipment and print the words "CONTAINS DD FORM 250" on the package.

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SECTION F - DELIVERIES OR PERFORMANCE

F.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.211-15	SEP 1990	DEFENSE PRIORITY AND ALLOCATION REQUIREMENTS
52.242-15	AUG 1989	STOP-WORK ORDER (ALTERNATE I) (APR 1984)
52.247-34	NOV 1991	F.O.B. DESTINATION

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE

None included by reference.

F.2 PERIOD OF PERFORMANCE

The period for issuance of task orders is 60 months from the effective date of this contract.

F.3 DELIVERY REQUIREMENTS (LaRC 52.211-96) (APR 2002)

Delivery shall be f.o.b. destination:

National Aeronautics and Space Administration, Langley Research Center
4 South Marvin Street (Bldg. 1206), Hampton, VA 23681-2199, or as specified in each task order

F.4 PLACE(S) OF PERFORMANCE (LaRC 52.211-98) (OCT 1992)

The place(s) of performance shall be:

The Contractor's facility, at subcontractor facilities, and other sites as may be specified by task orders.

SECTION G - CONTRACT ADMINISTRATION DATA

G.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE

None included by reference.

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.216-75	DEC 1988	PAYMENT OF FIXED FEE
1852.242-73	JUL 2000	NASA CONTRACTOR FINANCIAL MANAGEMENT REPORTING
1852.245-70	JUL 1997	CONTRACTOR REQUESTS FOR GOVERNMENT-OWNED EQUIPMENT

G.2 SUBMISSION OF VOUCHERS FOR PAYMENT (NFS 1852.216-87) (MAR 1998)

(a) The designated billing office for cost vouchers for purposes of the Prompt Payment clause of this contract is indicated below.
Public vouchers for payment of costs shall include a reference to the number of this contract.

(b)(1) If the contractor is authorized to submit interim cost vouchers directly to the NASA paying office, the original voucher should be submitted to:

NASA Langley Research Center
MS 175/ Accounts Payable
Hampton VA 23681

(2) For any period that the Defense Contract Audit Agency has authorized the Contractor to submit interim cost vouchers directly to the Government paying office, interim vouchers are not required to be sent to the Auditor, and are considered to be provisionally approved for payment, subject to final audit.

(3) Copies of vouchers should be submitted as directed by the Contracting Officer.

(c) If the contractor is not authorized to submit interim cost vouchers directly to the paying office as described in paragraph (b), the contractor shall prepare and submit vouchers as follows:

(1) One original Standard Form (SF) 1034, SF 1035, or equivalent Contractor's attachment to:

DCAA Hampton Roads Region
5200 West Mercury Blvd., Suite 291
Hampton VA 23605

(2) Three copies of SF 1034, SF 1035A, or equivalent Contractor's attachment to the following offices by insertion in the memorandum block of their names and addresses:

(i) Copy 1 NASA Contracting Officer

(ii) Copy 2 Auditor

(iii) Copy 3 Contractor

(3) The Contracting Officer may designate other recipients as required.

(d) (1) Public vouchers for payment of fee shall be prepared similarly to the procedures in paragraphs (b) or (c) of this clause, whichever is applicable, and be forwarded to:

NASA Langley Research Center
MS 175/ Accounts Payable
Hampton VA 23681

This is the designated billing office for fee vouchers for purposes of the Prompt Payment clause of this contract.

(2) Fixed fee shall be paid in monthly installments based upon the percentage of completion of work as determined by the Contracting Officer. The following formulas are provided as a convenience for calculating the interim fee provided the formulas produce a reasonable percentage as compared to completion of work. You should show both formulas on your fee voucher, however, the maximum fee percentage for fee billing is the smaller of the percentages resulting from the application of the two formulas. If at any time the Contracting Officer determines that the fee percentage is not concert with the completion of work, the fee formula will be adjusted, or another methodology that results in comparative fee billing agree upon.

(#) $\frac{\text{Cost Incurred to Date}}{\text{Contract Estimated Cost}} =$ %

(#) Months of Performance Expended to Date

Contract Period of Performance (Months) = %

(e) In the event that amounts are withheld from payment in accordance with provisions of this contract, a separate voucher for the amount withheld will be required before payment for that amount may be made.

G.3 DESIGNATION OF NEW TECHNOLOGY REPRESENTATIVE AND PATENT REPRESENTATIVE (NASA 1852.227-72) (JUL 1997) (LaRC FILL IN)

(a) For purposes of administration of the clause of this contract entitled "New Technology" or "Patent Rights -- Retention by the Contractor (Short Form)", whichever is included, the following named representatives are hereby designated by the Contracting Officer to administer such clause:

New Technology Representative
Office Code 212
NASA Langley Research Center
Hampton, VA 23681-2199

Patent Representative
Office Code 212
NASA Langley Research Center
Hampton, VA 23681-2199

(b) Reports of reportable items, and disclosure of subject inventions, interim reports, final reports, utilization reports, and other reports required by the clause, as well as any correspondence with respect to such matters, should be directed to the New Technology Representative unless transmitted in response to correspondence or request from the Patent Representative. Inquires or requests regarding disposition of rights, election of rights, or related matters should be directed to the Patent Representative. This clause shall be included in any subcontract hereunder requiring a "New Technology" clause or "Patent Rights--Retention by the Contractor (Short Form)" clause, unless otherwise authorized or directed by the Contracting Officer. The respective responsibilities and authorities of the above-named representatives are set forth in 1827.305-370 of the NASA FAR Supplement.

G.4 FINANCIAL REPORTING OF NASA PROPERTY IN THE CUSTODY OF CONTRACTORS NFS 1852.245-73 (AUGUST 2001) (DEVIATION)

(a) The Contractor shall submit annually a NASA Form (NF) 1018, NASA Property in the Custody of Contractors, in accordance with the provisions of 1845.505-14, the instructions on the form, subpart 1845.71, and any supplemental instructions for the current reporting period issued by NASA.

(b)(1) Subcontractor use of NF 1018 is not required by this clause; however, the Contractor shall include data on property in the possession of subcontractors in the annual NF 1018.

(2) The Contractor shall mail the original signed NF 1018 directly to the cognizant NASA Center Deputy Chief Financial Officer, Finance, unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(3) One copy shall be submitted (through the Department of Defense (DOD) Property Administrator if contract administration has been delegated to DOD) to the following address: Attention: Industrial Property Office, NASA Langley Research Center, Office of Logistics Management, Mail Stop 377, Hampton VA 23681-2199; unless the Contractor uses the NF 1018 Electronic Submission System (NESS) for report preparation and submission.

(c)(1) The annual reporting period shall be from October 1 of each year through September 30 of the following year. The report shall be submitted in time to be received by October 15. The information contained in these reports is entered into the NASA accounting system to reflect current asset values for agency financial statement purposes. Therefore, it is essential that required reports be received no later than October 15. Some activity may be estimated for the month of September, if necessary, to ensure the NF 1018 is received when due. However, contractors procedures must document the process for developing these estimates based on planned activity such as planned purchases or NASA Form 533 (NF 533 Contractor Financial Management Report) cost estimates. It should be supported and documented by historical experience or other corroborating evidence, and be retained in accordance with FAR Subpart 4.7, Contractor Records Retention. Contractors shall validate the reasonableness of the estimates and associated methodology by comparing them to the actual activity once that data is available, and adjust them accordingly. In addition, differences between the estimated cost and actual cost must be adjusted during the next reporting period. Contractors shall have formal policies and procedures, which address the validation of NF 1018 data, including data from subcontractors, and the identification and timely reporting of errors. The objective of this validation is to ensure that information reported is accurate and in compliance with the NASA FAR Supplement. If errors are discovered on NF 1018 after submission, the contractor shall immediately contact the cognizant NASA Center Industrial Property Officer (IPO) to discuss corrective action.

(2) The Contracting Officer may, in NASA's interest, withhold payment until a reserve not exceeding $25,000 or 5 percent of the amount of the contract, whichever is less, has been set aside, if the Contractor fails to submit annual NF 1018 reports in accordance with 1845.505-14 and any supplemental instructions for the current reporting period issued by NASA. Such reserve shall be withheld until the Contracting Officer has determined that NASA has received the required reports. The withholding of any amount or the subsequent payment thereof shall not be construed as a waiver of any Government right.

(d) A final report shall be submitted within 30 days after disposition of all property subject to reporting when the contract performance period is complete in accordance with (b)(1) through (3) of this clause.

SECTION H - SPECIAL CONTRACT REQUIREMENTS

H.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE

None included by reference.

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.204-74	MAY 2002	CENTRAL CONTRACTOR REGISTRATION
1852.208-81	OCT 2001	RESTRICTIONS ON PRINTING AND DUPLICATING
1852.223-70	APR 2002	SAFETY AND HEALTH
1852.223-75	FEB 2002	MAJOR BREACH OF SAFETY OR SECURITY
1852.235-73	FEB 2003	FINAL SCIENTIFIC AND TECHNICAL REPORTS (Alternate II)(Feb 2003)
1852.244-70	APR 1985	GEOGRAPHIC PARTICIPATION IN THE AEROSPACE PROGRAM

H.2 SECURITY PROGRAM/NON-U.S. CITIZEN EMPLOYEE ACCESS REQUIREMENTS (LaRC 52.204-91) (Oct 03)

(a) Access to the LaRC by contractor non-U.S. citizen employees, including employees in permanent resident alien status, shall be approved in accordance with NPR 1371.2 and LMS-CP-4850-- "Non-U.S. Citizen(s)/Foreign Representative(s) Visitor Approval". Administrative processing requires advance notice of between 20 to 45 days depending on the nationality of the non-U.S. citizen. Access authorization shall be for a maximum of one year, and must be reevaluated annually. Non-U.S. citizen employees must be under escort at all times while on Center by a U.S. citizen issued a LaRC identification badge.

(b) Request for Center access in excess of 90 days requires that a background investigation be conducted on the non-U.S. citizen employee. The processing of a background investigation requires the submittal of a NASA Form 531, "Name Check Request," and a fingerprint card application. Normal processing time for a background investigation is approximately 90 days. A fa-

vorably adjudicated background investigation shall allow non-U.S. citizen contractor employee limited unescorted access to the Center. Access shall be limited to work areas identified and deemed necessary and entry and egress to that site.

H.3 UNESCORTED ACCESS BY U.S CITIZEN CONTRACTOR EMPLOYEES (LaRC 52.204-102) (NOV 2002)

Visits by U.S. citizen contractor employees that are expected will exceed 90 days will require the employee to undergo a Background Investigation. All Contractor employees must, as a minimum, have a favorably adjudicated NASA Agency Check (NAC). However, a NAC is not required if the Contractor can certify that an employee has an active United States Government Security Clearance, (IAW requirements of Executive Order #12968), or has been the subject of a prior favorable NAC investigation.

For contractor employees requiring a NAC, the Contractor shall require its employees to submit a "Name Check Request" (NASA Form 531), an "Authorization for Release of Credit Reports" (NASA Form 1684), and a completed FD-258, "Applicant Fingerprint Card" to the LaRC Badge and Pass Office, Mail Stop 232. Fingerprint cards will be completed at the Badge and Pass Office only. Normal processing time for a NASA NAC is approximately 60 days.

H.4 (LIMITED) RELEASE OF CONTRACTOR CONFIDENTIAL BUSINESS INFORMATION (CBI) (LaRC 52.204-104) (JAN 2002)

(a) NASA may find it necessary to release information submitted by the Contractor, either in response to this solicitation or pursuant to the provisions of this contract, to individuals not employed by NASA. Business information that would ordinarily be entitled to confidential treatment may be included in the information released to these individuals. Accordingly, by submission of this proposal, or signature on this contract or other contracts, the Contractor hereby consents to a limited release of its Confidential Business Information (CBI).

(b) Possible circumstances where the Agency may release the Contractor's CBI include, but are not limited to, the following:

(1) To other Agency contractors and subcontractors, and their employees tasked with assisting the Agency in handling and processing information and documents in the evaluation, the award or the administration of Agency contracts, such as providing both preaward and post award audit support and specialized technical support to NASA's technical evaluation panels;

(2) To NASA contractors and subcontractors, and their employees engaged in information systems analysis, development, operation, and maintenance, including performing data processing and management functions for the Agency.

(c) NASA recognizes its obligation to protect the contractor from competitive harm that could result from the release of such information to a competitor. Except where otherwise provided by law, NASA will permit the limited release of CBI under subparagraphs (1) or (2) only pursu-

ant to non-disclosure agreements signed by the assisting contractor or subcontractor, and their individual employees who may require access to the CBI to perform the assisting contract.

(d) NASA's responsibilities under the Freedom of Information Act are not affected by this clause.

(e) The Contractor agrees to include this clause, including this paragraph (e), in all subcontracts at all levels awarded pursuant to this contract that require the furnishing of CBI by the subcontractor.

H.5 INCORPORATION OF SECTION K OF THE PROPOSAL BY REFERENCE (LaRC 52.215-107) (NOV 2002)

Pursuant to FAR 15.204-1(b), the completed Section K of the proposal is hereby incorporated by reference.

H.6 SMALL DISADVANTAGED BUSINESS PARTICIPATION--CONTRACT TARGETS (LaRC 52.219-91) (OCT 2002) (for offeror fill-in)

Fill-In: By offeror

(a) This clause does not apply to, and should not be completed by, Small Disadvantaged Business (SDB) offerors unless the SDB offeror has waived the price adjustment evaluation adjustment [see Paragraph (c) of FAR clause 52.219-23].

(b) FAR 19.1202-4(a) requires that SDB participation targets be incorporated in the contract. Targets for this contract are as follows: (See Internet at http://www.census.gov/epcd/www/naics.html for Department of Commerce NAICS Industry Subsectors.)

Department of Commerce NAICS Industry Subsector		Dollar Target	Percent of Contract Value
Year 1	**541710**	**$730,500.03**	**10.61%**
Year 2	**541710**	**$755,308.83**	**10.62%**
Year 3	**541710**	**$780,967.24**	**10.64%**
Year 4	**541710**	**$807,475.26**	**10.65%**
Year 5	**541710**	**$835,002.83**	**10.66%**

(c) FAR 19.1202-4(b) requires that SDB concerns that are specifically identified by the offeror be listed in the contract when the extent of the identification of such subcontractors was part of the SDB evaluation subfactor. SDB concerns (subcontractors) specifically identified by the offeror are as follows:

Name of Concern(s):

Eagle Aeronautics, Inc.

The Contractor shall notify the Contracting Officer of any substitutions of firms that are not SDB concerns.

(d) If the prime offeror is an SDB (including joint venture partners and team members) that has waived the price evaluation adjustment, the target for the work it intends to perform as a prime contractor in authorized Department of Commerce NAICS Industry Subsectors is as follows:

Not Applicable

Percent of Dollars	Contract Value
Year 1	
Year 2	
Year 3	
Year 4	
Year 5	

H.7 ADVANCE REVIEW FOR RELEASE OF TECHNICAL INFORMATION (LaRC 52.227-92) (JUL 2002)

The Contractor shall submit technical information regarding the contract effort, such as journal articles, meeting papers, and technical documents to the Contracting Officer's Technical Representative (COTR) for review and comment prior to publication, presentation or release to others. The COTR will have 30 days from submission to review all material proposed for publication and submit comments to the Contractor which will be given full consideration before publishing.

[Applicable to offerors who are compliant at time of award]

H.8 QUALITY MANAGEMENT SYSTEM REQUIREMENTS (ISO 9001:2000) (LaRC 52.246-97) (SEP 2002)

The Contractor's quality system shall be compliant with the requirements of the current ANSI/ISO/ASQC Q ISO 9001 standard, Quality Management Systems Requirements.

The Contractor's quality system shall remain in compliance with the ISO 9001 standard during the term of the contract. The Government reserves the rights to audit the Contractor's quality system at any time.

"Compliant" as used in this clause means that the contractor has defined, documented, and will continually implement during the term of the contract management-approved methods of operation that conform to the requirements given in the above-cited International Standard.

[Applicable to Offerors who are not compliant at time of award]

H.9 QUALITY MANAGEMENT SYSTEM COMPLIANCE REQUIREMENTS (ISO 9001:2000) (LaRC 52.246-96) (SEP 2002)

The Contractor's quality system shall be compliant with the requirements of the current ANSI/ISO/ASQC Q ISO 9001 standard, Quality Management Systems Requirements.

Since the Contractor's quality system is not already compliant with the requirements of the current ANSI/ISO/ASQC Q ISO 9001 standard, the Contractor shall develop quality system procedures and associated documentation to become compliant within nine months after the contract effective date.

Once compliance with the current ANSI/ISO/ASQC Q IS0 9001 has been achieved, an updated Quality System Manual and final documentation (addressing the topics noted in the Contractor's compliance plan) should be submitted for review and acceptance.

The Contractor's quality system shall remain in compliance with the ISO 9001 standard during the term of the contract. The Government reserves the right to audit the Contractor's quality system at any time.

"Compliant" as used in this clause means that the contractor has defined, documented, and will continually implement during the term of the contract management-approved methods of operation that conform to the requirements given in the above-cited International Standard.

H.10 TASK ORDERING PROCEDURE (NFS 1852.216-80) (OCT 1996)

(a) Only the Contracting Officer may issue task orders to the Contractor, providing specific authorization or direction to perform work within the scope of the contract and as specified in the schedule. The Contractor may incur costs under this contract in performance of task orders and task order modifications issued in accordance with this clause. No other costs are authorized unless otherwise specified in the contract or expressly authorized by the Contracting Officer.
(b) Prior to issuing a task order, the Contracting Officer shall provide the Contractor with the following data:
(1) A functional description of the work identifying the objectives or results desired from the contemplated task order.
(2) Proposed performance standards to be used as criteria for determining whether the work requirements have been met.
(3) A request for a task plan from the Contractor to include the technical approach, period of performance, appropriate cost information, and any other information required to determine the reasonableness of the Contractor's proposal.
(c) The Contractor shall submit a task plan conforming to the Contracting Officer's request,

within the time period specified in the individual task orders. Typically, the normal time period for task plan submittal is 15 days; however, the period may vary.
(d) After review and any necessary discussions, the Contracting Officer may issue a task order to the Contractor containing, as a minimum, the following:
(1) Date of the order.
(2) Contract number and order number.
(3) Functional description of the work identifying the objectives or results desired from the task order, including special instructions or other information necessary for performance of the task.
(4) Performance standards, and where appropriate, quality assurance standards.
(5) Maximum dollar amount authorized (cost and fee).
(6) Any other resources (travel, materials, equipment, facilities, etc.) authorized.
(7) Delivery/performance schedule including start and end dates.
(8) Accounting and appropriation data.
(e) The Contractor shall provide acknowledgment of receipt to the Contracting Officer within 3 calendar days after receipt of the task order.
(f) If time constraints do not permit issuance of a fully defined task order in accordance with the procedures described in paragraphs (a) through (d), a task order which includes a ceiling price may be issued.
(g) The Contracting Officer may amend tasks in the same manner in which they were issued.
(h) In the event of a conflict between the requirements of the task order and the Contractor's approved task plan, the task order shall prevail.

H.11 FLIGHT TEST OPERATIONS AND SAFETY REPORT (FTOSR) INFORMATION (LaRC 52.223-91) (OCT 2003)

The Technical Point of Contact (POC) and/or COTR must submit a Flight Test Operations and Test and Safety Report (FTOSR) to the Airworthiness and Safety review Board (ASRB) for evaluation and approval in order to obtain a Flight Safety Release letter. The contractor shall support the Technical Point of Contact (POC) and/or COTR to obtain this Flight Safety Release letter when work performed under this contract requires experiments to be flown on or involving aircraft (including balloon borne experiments/instruments) whose flights occur within the Earth's sensible atmosphere. Specifically such flights include full-scale aircraft or aircraft models, either manned or unmanned and either powered or un-powered. No flight test/flight experiment shall be conducted until a Flight Safety Release letter is obtained. This is applicable for aircraft that are either NASA, University or Contractor-owned. The contractor shall develop the FTOSR or information required for the FTOSR. The Flight Safety Release letter is obtained by the Technical Point of Contact (POC) and/or COTR from the LaRC Airworthiness and Safety Review Board (ASRB) per the requirements of LMS-CP-5580 "Airworthiness and Safety Review Board", and in accordance with LAPD-1710.1 and LAPG 1710.16. An outline for the FTOSR is provided below. If an item in the FTOSR does not apply, the item must be marked as such and a brief reason why it does not apply.

Flight Test Operations and Safety Report (FTOSR) Outline:

Cover Sheet w/ Approvals

Program/Project Overview:

Program Objectives & General Description
Program Management
Selected Aircraft
Proposed Aircraft Modifications & Design Criteria
Instrumentation Hardware/software & Flt Test
Data Measurement Requirements
Contractual Requirements
Other Involved Agencies
Summary of Supporting Research & Tests
Analytical
Wind Tunnel
Simulation
Ground Operating Systems Check out
Proposed Schedule Milestones

Flight Test Operations:

Location
Flight Tests Start Date
Number of Flights
Flight Frequency
Test Procedures (incl. maneuvers)

Support Requirements:

Support Organization & Responsibilities
Transportation to Test Location
Chase Aircraft
Photo/TV Coverage
Tracking
Radar
Optical
Beacon (incl. frequency)
Telemetry
Communications
Meteorological
Data
Real Time
Quick Look
Processed
Other Special Support Requirements

Safety:

System Safety Program Plan
Risk Assessment
Hazard Analysis
General Operational Restrictions & Conditions
Weather
Personal Equipment
Minimum On-board Equipment
Weight/Balance
Flight Test Envelope
Abort Procedures
Emergency Plans & Procedures
Configuration Control Responsibilities
Other

H.12 MULTIPLE AWARD CONTRACTS

Orders under this multiple award contract will be placed in accordance with FAR 16.505 and H.10, Task Ordering Procedure. Unless otherwise stated in an individual Task Order Request, the selection criteria to be considered to provide multiple awardees a fair opportunity to be considered for award for each order are: technical approach, cost, and past performance. Unless otherwise stated in an individual Task Order Request, these criteria will be considered of essentially equal importance.

H.13 TASK ORDER SOLICITATION AND SELECTION PROCEDURES

A. Each contractor will be given a fair opportunity to be considered for each order in accordance with FAR 16.505. This contract includes no requirement for the contractor to submit a task plan for any individual task order. The costs of preparing task plans for individual task orders under the contract will not be an allowable direct charge to the contract. However, these costs may be an allowable cost to the normal bid and proposal indirect cost pursuant to FAR 31.205-18.

The contracting officer (CO) will consider past performance, quality of services and/or deliverables, final proposed cost/price or other factors the contracting officer believes are relevant.

Contractors need not be given an opportunity to be considered for a particular order in excess of $2,500 under multiple Task Order contracts if the CO determines that-

1. The agency need for such supplies or services is of such urgency that providing such opportunity would result in unacceptable delays;

2. Only one such contractor is capable of providing such supplies or services required at the level of quality required because the supplies or services ordered are unique or highly specialized;

3. The order should be issued on a sole-source basis in the interest of economy and efficiency as a logical follow-on to an order already issued under the contract, provided that all contractors were given a fair opportunity to be considered for the original order; or

4. It is necessary to place an order to satisfy a minimum guarantee.

B. The CO need not contact each of the multiple award contractors before selecting an order awardee if the contracting officer has information available to ensure that each multiple contractor is provided a fair opportunity to be considered for each order.

C. For those orders, which are competed among the multiple contract awardees, the CO will provide a solicitation to each contractor and will request a task plan in accordance with H-10, Task Ordering Procedure. The solicitation will include a Statement of Work, specifications, or drawings; required delivery date, any special instructions or provisions, and any selection criteria to be used to award the Task Order which differs from that specified in H.13. Prior to awarding the Task Order, all awardees will be required to provide a task plan that may include the following: 1) technical approach, 2) implementation plan (including staffing, proposed facilities and subcontractors), and 3) estimated cost including breakouts of the estimated labor hours and all costs to perform the Task Order. The level of detail in each Task Plan will be dependent on the complexity of the requirement. Upon selection of an awardee, the CO and Contracting Officer Technical Representative (COTR) will review the task plan and cost estimate to complete the work. The contracting officer will negotiate any necessary changes with the Contractor. The final cost estimate represents the baseline to be used for reporting in Columns 7b and 7d of NASA Form 533M (See Exhibit A).

D. Orders may be issued by facsimile or be electronic commerce methods.

E. No protest is authorized in connection with this contract except for a protest on the grounds that the order increases the scope, period, or maximum value of the contract.

F. In the case where only one award is made as a result of this solicitation or if the CO determines that the Task Order shall not be competed (based on criteria stated in Paragraph A above), the following Task Order initiation procedure apply:

1. The COTR will provide a Statement of Work, specifications, or drawings; required delivery date, any special instructions or provisions to the Contractor.

2. The Contractor will be required to provide a task plan, which shall include a discussion of their technical approach for performing the work and an estimated cost for the proposed Task Order in accordance with H-10, Task Ordering Procedure. The estimated cost shall include breakouts of the estimated labor hours and costs to perform the Task Order.

3. The CO and COTR will review the task plan and cost estimate to complete the work. The CO will negotiate necessary changes with the Contractor.

4. The final negotiated cost estimate shall represent the baseline to be used for reporting in Columns 7b and 7d of NASA Form 533M (See Exhibit A).

H.14 EXPORT LICENSES (NFS 1852.225-70) (FEB 2000)

(a) The Contractor shall comply with all U.S. export control laws and regulations, including the International Traffic in Arms Regulations (ITAR), 22 CFR Parts 120 through 130, and the Export Administration Regulations (EAR), 15 CFR Parts 730 through 799, in the performance of this contract. In the absence of available license exemptions/exceptions, the Contractor shall be responsible for obtaining the appropriate licenses or other approvals, if required, for exports of hardware, technical data, and software, or for the provision of technical assistance.

(b) The Contractor shall be responsible for obtaining export licenses, if required, before utilizing foreign persons in the performance of this contract, including instances where the work is to be performed on-site at NASA Langley Research Center, where the foreign person will have access to export-controlled technical data or software.

(c) The Contractor shall be responsible for all regulatory record keeping requirements associated with the use of licenses and license exemptions/exceptions.

(d) The Contractor shall be responsible for ensuring that the provisions of this clause apply to its subcontractors.

PART II - CONTRACT CLAUSES

SECTION I - CONTRACT CLAUSES

I.1 LISTING OF CLAUSES INCORPORATED BY REFERENCE

NOTICE: The following contract clauses pertinent to this section are hereby incorporated by reference:

I. FEDERAL ACQUISITION REGULATION (48 CFR CHAPTER 1)

CLAUSE NUMBER	DATE	TITLE
52.202-1	DEC 2001	DEFINITIONS
52.203-3	APR 1984	GRATUITIES
52.203-5	APR 1984	COVENANT AGAINST CONTINGENT FEES
52.203-6	JUL 1995	RESTRICTIONS ON SUBCONTRACTOR SALES TO THE GOVERNMENT
52.203-7	JUL 1995	ANTI-KICKBACK PROCEDURES
52.203-8	JAN 1997	CANCELLATION, RESCISSION AND RECOVERY OF FUNDS FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-10	JAN 1997	PRICE OR FEE ADJUSTMENT FOR ILLEGAL OR IMPROPER ACTIVITY
52.203-12	JUN 2003	LIMITATION ON PAYMENTS TO INFLUENCE CERTAIN FEDERAL TRANSACTIONS
52.204-4	AUG 2000	PRINTED OR COPIED DOUBLE-SIDED ON RECYCLED PAPER
52.209-6	JUL 1995	PROTECTING THE GOVERNMENT'S INTEREST WHEN SUBCONTRACTING WITH CONTRACTORS DEBARRED, SUSPENDED, OR PROPOSED FOR DEBARMENT
52.215-2	JUN 1999	AUDIT AND RECORDS--NEGOTIATION
52.215-8	OCT 1997	ORDER OF PRECEDENCE - UNIFORM CONTRACT FORMAT
52.215-11	OCT 1997	PRICE REDUCTION FOR DEFECTIVE COST OR PRICING DATA-- MODIFICATIONS
52.215-13	OCT 1997	SUBCONTRACTOR COST OR PRICING DATA - MODIFICATIONS
52.215-14	OCT 1997	INTEGRITY OF UNIT PRICES
52.215-15	DEC 1998	PENSION ADJUSTMENTS AND ASSET REVERSIONS
52.215-17	OCT 1997	WAIVER OF FACILITIES CAPITAL COST OF

52.215-18	OCT 1997	REVERSION OR ADJUSTMENT OF PLANS FOR POSTRETIREMENT BENEFITS (PRB) OTHER THAN PENSIONS
52.215-19	OCT 1997	NOTIFICATION OF OWNERSHIP CHANGES
52.215-21	OCT 1997	REQUIREMENTS FOR COST OR PRICING DATA OR INFORMATION OTHER THAN COST OR PRICING DATA -- MODIFICATIONS (ALTERNATE IV) (OCT 1997)

Insert (b) Provide information described below:

_____

_____

_____

_____

52.216-7	DEC 2002	ALLOWABLE COST AND PAYMENT
52.216-8	MAR 1997	FIXED FEE
52.219-8	OCT 2000	UTILIZATION OF SMALL BUSINESS CONCERNS
52.219-9	JAN 2002	SMALL BUSINESS SUBCONTRACTING PLAN (ALTERNATE II) (OCT 2001)
52.219-16	JAN 1999	LIQUIDATED DAMAGES SUBCONTRACTING PLAN
52.222-1	FEB 1997	NOTICE TO THE GOVERNMENT OF LABOR DISPUTES
52.222-2	JUL 1990	PAYMENT FOR OVERTIME PREMIUMS

Insert "$0 (Zero)" in paragraph (a).

52.222-3	JUN 2003	CONVICT LABOR
52.222-21	FEB 1999	PROHIBITION OF SEGREGATED FACILITIES
52.222-26	APR 2002	EQUAL OPPORTUNITY
52.222-35	DEC 2001	EQUAL OPPORTUNITY FOR SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.222-36	JUN 1998	AFFIRMATIVE ACTION FOR WORKERS WITH DISABILITIES
52.222-37	DEC 2001	EMPLOYMENT REPORTS ON SPECIAL DISABLED VETERANS, VETERANS OF THE VIETNAM ERA, AND OTHER ELIGIBLE VETERANS
52.223-6	MAY 2001	DRUG-FREE WORKPLACE
52.223-14	AUG 2003	TOXIC CHEMICAL RELEASE REPORTING
52.225-13	DEC 2003	RESTRICTIONS ON CERTAIN FOREIGN PURCHASES
52.225-16	FEB 2000	SANCTIONED EUROPEAN UNION COUNTRY SERVICES
52.227-1	JUL 1995	AUTHORIZATION AND CONSENT (ALTERNATE I) (APR 1984)

52.227-2	AUG 1996	NOTICE AND ASSISTANCE REGARDING PATENT AND COPYRIGHT INFRINGEMENT
52.227-11	JUN 1997	PATENT RIGHTS--RETENTION BY THE CONTRACTOR (SHORT FORM) (AS MODIFIED BY NFS 1852.227-11) (MAY 2002)
52.227-14	JUN 1987	RIGHTS IN DATA--GENERAL ALTERNATE II (JUN 1987) ALTERNATE III (JUN 1987) AS MODIFIED BY 1852.227-14 NASA FAR SUPPLEMENT (OCT 1995)
52.228-7	MAR 1996	INSURANCE--LIABILITY TO THIRD PERSONS
52.230-2	APR 1998	COST ACCOUNTING STANDARDS
52.230-3	APR 1998	DISCLOSURE AND CONSISTENCY OF COST ACCOUNTING PRACTICES
52.230-6	NOV 1999	ADMINISTRATION OF COST ACCOUNTING STANDARDS
52.232-9	APR 1984	LIMITATION ON WITHHOLDING OF PAYMENTS
52.232-17	JUN 1996	INTEREST
52.232-22	APR 1984	LIMITATION OF FUNDS
52.232-23	JAN 1986	ASSIGNMENT OF CLAIMS
52.232-25	OCT 2003	PROMPT PAYMENT
52.232-34	MAY 1999	PAYMENT BY ELECTRONIC FUNDS TRANSFER--OTHER THAN CENTRAL CONTRACTOR REGISTRATION
		Insert no later than 15 days prior to submission of the first request for payment in Paragraph (b)(1).
52.233-1	JUL 2002	DISPUTES (ALTERNATE I) (DEC 1991)
52.233-3	AUG 1996	PROTEST AFTER AWARD (ALTERNATE I) (JUN 1985)
52.242-1	APR 1984	NOTICE OF INTENT TO DISALLOW COSTS
52.242-3	MAY 2001	PENALTIES FOR UNALLOWABLE COSTS
52.242-4	JAN 1997	CERTIFICATION OF FINAL INDIRECT COSTS
52.242-13	JUL 1995	BANKRUPTCY
52.243-2	AUG 1987	CHANGES--COST-REIMBURSEMENT (ALTERNATE V) (APR 1984)
52.244-5	DEC 1996	COMPETITION IN SUBCONTRACTING
52.244-6	APR 2003	SUBCONTRACTS FOR COMMERCIAL ITEMS
52.245-5	JUN 2003	GOVERNMENT PROPERTY (COST-REIMBURSEMENT, TIME-AND- MATERIAL, OR LABOR-HOUR CONTRACTS)
52.246-23	FEB 1997	LIMITATION OF LIABILITY
52.247-1	APR 1984	COMMERCIAL BILL OF LADING NOTATIONS
52.249-6	SEP 1996	TERMINATION (COST-REIMBURSEMENT)
52.249-14	APR 1984	EXCUSABLE DELAYS
52.253-1	JAN 1991	COMPUTER GENERATED FORMS

II. NASA FAR SUPPLEMENT (48 CFR CHAPTER 18) CLAUSES

CLAUSE NUMBER	DATE	TITLE
1852.203-70	JUN 2001	DISPLAY OF INSPECTOR GENERAL HOTLINE POSTERS
1852.216-89	JUL 1997	ASSIGNMENT AND RELEASE FORMS
1852.219-74	SEP 1990	USE OF RURAL AREA SMALL BUSINESSES
1852.219-76	JUL 1997	NASA 8 PERCENT GOAL
1852.235-70	FEB 2003	CENTER FOR AEROSPACE INFORMATION
1852.243-71	MAR 1997	SHARED SAVINGS

I.2 CLAUSES IN FULL TEXT

The clauses listed below follow in full text:

CLAUSE NUMBER	DATE	TITLE
52.216-18	OCT 1995	ORDERING
52.216-19	OCT 1995	ORDER LIMITATIONS
52.216-22	OCT 1995	INDEFINITE QUANTITY
52.219-4	JAN 1999	NOTICE OF EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS
52.219-23	JUN 2003	NOTICE OF PRICE EVALUATION ADJUSTMENT FOR SMALL DISADVANTAGED BUSINESS CONCERNS
52.219-25	OCT 1999	SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM-DISADVANTAGED STATUS AND REPORTING
52.252-2	FEB 1998	CLAUSES INCORPORATED BY REFERENCE
52.252-6	APR 1984	AUTHORIZED DEVIATIONS IN CLAUSES
1852.219-75	MAY 1999	SMALL BUSINESS SUBCONTRACTING REPORTING

I.3 ORDERING (FAR 52.216-18) (OCT 1995)

(a) Any supplies and services to be furnished under this contract shall be ordered by issuance of delivery orders or task orders by the individuals or activities designated in the Schedule. Such orders may be issued from contract award through 60 months from the effective date of the contract.

(b) All delivery orders or task orders are subject to the terms and conditions of this contract. In the event of conflict between a delivery order or task order and this contract, the contract shall control.

(c) If mailed, a delivery order or task order is considered "issued" when the Government deposits the order in the mail. Orders may be issued orally, by facsimile, or by electronic commerce methods only if authorized in the Schedule.

I.4 ORDER LIMITATIONS (FAR 52.216-19) (OCT 1995)

(a) Minimum order. When the Government requires supplies or services covered by this contract in an amount of less than $1,000, the Government is not obligated to purchase, nor is the Contractor obligated to furnish, those supplies or services under the contract.

(b) Maximum order. The Contractor is not obligated to honor--

(1) Any order for a single item in excess of $20,000,000;

(2) Any order for a combination of items in excess of $20,000,000; or

(3) A series of orders from the same ordering office within 10 days that together call for quantities exceeding the limitation in subparagraph (1) or (2) of this section.

(c) If this is a requirements contract (i.e., includes the Requirements clause at subsection 52.216-21 of the Federal Acquisition Regulation (FAR)), the Government is not required to order a part of any one requirement from the Contractor if that requirement exceeds the maximum-order limitations in paragraph (b) of this section.

(d) Notwithstanding paragraphs (b) and (c) of this section, the
Contractor shall honor any order exceeding the maximum order limitations in paragraph (b), unless that order (or orders) is returned to the ordering office within 10 days after issuance, with written notice stating the Contractor's intent not to ship the item (or items) called for and the reasons. Upon receiving this notice, the Government may acquire the supplies or services from another source.

I.5 INDEFINITE QUANTITY (FAR 52.216-22) (OCT 1995)

(a) This is an indefinite-quantity contract for the supplies or services specified, and effective for the period stated, in the
Schedule. The quantities of supplies and services specified in the Schedule are estimates only and are not purchased by this contract.

(b) Delivery or performance shall be made only as authorized by orders issued in accordance with the Ordering clause. The Contractor shall furnish to the Government, when and if ordered, the supplies or services specified in the Schedule up to and including the quantity designated in the Schedule as the "maximum." The Government shall order at least the quantity of supplies or services designated in the Schedule as the "minimum."

(c) Except for any limitations on quantities in the Order Limitations clause or in the Schedule, there is no limit on the number of orders that may be issued. The Government may issue orders requiring delivery to multiple destinations or performance at multiple locations.

(d) Any order issued during the effective period of this contract and not completed within that period shall be completed by the Contractor within the time specified in the order. The contract shall govern the Contractor's and Government's rights and obligations with respect to that order to the same extent as if the order were completed during the contract's effective period; provided, that the Contractor shall not be required to make any deliveries under this contract after 6 months from the end of the contract period of performance.

I.6 NOTICE OF PRICE EVALUATION PREFERENCE FOR HUBZONE SMALL BUSINESS CONCERNS (FAR 52.219-4) (Jan 1999)

(a) Definition. HUBZone small business concern, as used in this clause, means a small business concern that appears on the List of Qualified HUBZone Small Business Concerns maintained by the Small Business Administration.
(b) Evaluation preference.
(1) Offers will be evaluated by adding a factor of 10 percent to the price of all offers, except-
(i) Offers from HUBZone small business concerns that have not waived the evaluation preference;
(ii) Otherwise successful offers from small business concerns;
(iii) Otherwise successful offers of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is exceeded (see 25.402 of the Federal Acquisition Regulation (FAR)); and
(iv) Otherwise successful offers where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government.
(2) The factor of 10 percent shall be applied on a line item basis or to any group of items on which award may be made. Other evaluation factors described in the solicitation shall be applied before application of the factor.
(3) A concern that is both a HUBZone small business concern and a small disadvantaged business concern will receive the benefit of both the HUBZone small business price evaluation preference and the small disadvantaged business price evaluation adjustment (see FAR clause 52.219-23). Each applicable price evaluation preference or adjustment shall be calculated independently against an offeror's base offer. These individual preference amounts shall be added together to arrive at the total evaluated price for that offer.
(c) Waiver of evaluation preference. A HUBZone small business concern may elect to waive the evaluation preference, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply if the offeror has waived the evaluation preference.
Offer elects to waive the evaluation preference.
(d) Agreement. A HUBZone small business concern agrees that in the performance of the contract, in the case of a contract for
(1) Services (except construction), at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern or employees of other HUBZone small business concerns;
(2) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern or other HUBZone small business concerns;

(3) General construction, at least 15 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns; or
(4) Construction by special trade contractors, at least 25 percent of the cost of the contract performance incurred for personnel will be spent on the concern's employees or the employees of other HUBZone small business concerns.
(e) A HUBZone joint venture agrees that in the performance of the contract, the applicable percentage specified in paragraph (d) of this clause will be performed by the HUBZone small business participant or participants;
(f) A HUBZone small business concern nonmanufacturer agrees to furnish in performing this contract only end items manufactured or produced by HUBZone small business manufacturer concerns. This paragraph does not apply in connection with construction or service contracts.

I.7 NOTICE OF PRICE EVALUATION ADJUSTMENT FOR SMALL DISADVANTAGED BUSINESS CONCERNS (FAR 52.219-23) (MAY 2001)

(a) Definitions. As used in this clause--

"Small disadvantaged business concern" means an offeror that represents, as part of its offer, that it is a small business under the size standard applicable to this acquisition; and either--

(1) It has received certification by the Small Business Administration as a small disadvantaged business concern consistent with 13 CFR part 124, subpart B; and

(i) No material change in disadvantaged ownership and control has occurred since its certification;

(ii) Where the concern is owned by one or more disadvantaged individuals, the net worth of each individual upon whom the certification is based does not exceed $750,000 after taking into account the applicable exclusions set forth at 13 CFR
124.104(c)(2); and

(iii) It is identified, on the date of its representation, as a certified small disadvantaged business concern in the database maintained by the Small Business Administration (PRO-Net).

(2) It has submitted a completed application to the Small Business Administration or a Private Certifier to be certified as a small disadvantaged business concern in accordance with 13 CFR part 124, subpart B, and a decision on that application is pending, and that no material change in disadvantaged ownership and control has occurred since its application was submitted. In this case, in order to receive the benefit of a price evaluation adjustment, an offeror must receive certification as a small disadvantaged business concern by the Small Business Administration prior to contract award; or

(3) Is a joint venture as defined in 13 CFR 124.1002(f).

"Historically black college or university" means an institution determined by the Secretary of Education to meet the requirements of 34 CFR 608.2. For the Department of Defense (DoD), the National Aeronautics and Space Administration (NASA), and the Coast Guard, the term also includes any nonprofit research institution that was an integral part of such a college or university before November 14, 1986.

"Minority institution" means an institution of higher education meeting the requirements of Section 1046(3) of the Higher Education Act of 1965 (20 U.S.C. 1067k including, a Hispanic-serving institution of higher education, as defined in Section 316(b)(1) of the Act (20 U.S.C. 1101a)).

"United States" means the United States, its territories and possessions, the Commonwealth of Puerto Rico, the U.S. Trust Territory of the Pacific Islands, and the District of Columbia.

(b) Evaluation adjustment. (1) The Contracting Officer will evaluate offers by adding a factor of 10 (TEN) percent to the price of all offers, except--

(i) Offers from small disadvantaged business concerns that have not waived the adjustment;

(ii) An otherwise successful offer of eligible products under the Trade Agreements Act when the dollar threshold for application of the Act is equaled or exceeded (see section 25.402 of the Federal Acquisition Regulation (FAR));

(iii) An otherwise successful offer where application of the factor would be inconsistent with a Memorandum of Understanding or other international agreement with a foreign government;

(iv) For DoD, NASA, and Coast Guard acquisitions, an otherwise successful offer from a historically black college or university or minority institution; and

(v) For DoD acquisitions, an otherwise successful offer of qualifying country end products (see sections 225.000-70 and 252.225-7001 of the Defense FAR Supplement).

(2) The Contracting Officer will apply the factor to a line item or a group of line items on which award may be made. The Contracting Officer will apply other evaluation factors described in the solicitation before application of the factor. The factor may not be applied if using the adjustment would cause the contract award to be made at a price that exceeds the fair market price by more than the factor in paragraph (b)(1) of this clause.

(c) Waiver of evaluation adjustment. A small disadvantaged business concern may elect to waive the adjustment, in which case the factor will be added to its offer for evaluation purposes. The agreements in paragraph (d) of this clause do not apply to offers that waive the adjustment.

Offeror elects to waive the adjustment.

(d) Agreements. (1) A small disadvantaged business concern, that did not waive the adjustment, agrees that in performance of the contract, in the case of a contract for--

(i) Services, except construction, at least 50 percent of the cost of personnel for contract performance will be spent for employees of the concern;

(ii) Supplies (other than procurement from a nonmanufacturer of such supplies), at least 50 percent of the cost of manufacturing, excluding the cost of materials, will be performed by the concern;

(iii) General construction, at least 15 percent of the cost of the contract, excluding the cost of materials, will be performed by employees of the concern; or

(iv) Construction by special trade contractors, at least 25 percent of the cost of the contract, excluding the cost of materials, will be performed by employees of the concern.

(2) A small disadvantaged business concern submitting an offer in its own name agrees to furnish in performing this contract only end items manufactured or produced by small disadvantaged business concerns in the United States. This paragraph does not apply in connection with construction or service contracts.

I.8 SMALL DISADVANTAGED BUSINESS PARTICIPATION PROGRAM-- DISADVANTAGED STATUS AND REPORTING (FAR 52.219-25) (OCT 1999)

(a) Disadvantaged status for joint venture partners, team members, and subcontractors. This clause addresses disadvantaged status for joint venture partners, teaming arrangement members, and subcontractors and is applicable if this contract contains small disadvantaged business (SDB) participation targets. The Contractor shall obtain representations of small disadvantaged status from joint venture partners, teaming arrangement members, and subcontractors through use of a provision substantially the same as paragraph (b)(1)(i) of the provision at FAR 52.219-22, Small Disadvantaged Business Status. The Contractor shall confirm that a joint venture partner, team member, or subcontractor representing itself as a small disadvantaged business concern, is identified as a certified small disadvantaged business in the database maintained by the Small Business Administration (PRO-Net) or by contacting the SBA's Office of Small Disadvantaged Business Certification and Eligibility.

(b) Reporting requirement. If this contract contains SDB participation targets, the Contractor shall report on the participation of SDB concerns at contract completion, or as otherwise provided in this contract. Reporting may be on Optional Form 312, Small Disadvantaged Business Participation Report, or in the Contractor's own format providing the same information. This report is required for each contract containing SDB participation targets. If this contract contains an individual Small, Small Disadvantaged and Women-Owned Small Business Subcontracting Plan, reports may be submitted with the final Subcontracting Report for Individual Contracts (Standard Form
294) at the completion of the contract.

I.9 RIGHTS TO PROPOSAL DATA (TECHNICAL) (FAR 52.227-23) (JUN 1987)

Except for data contained on pages **all pages of this proposal**, it is agreed that as a condition of award of this contract, and notwithstanding the conditions of any notice appearing thereon, the Government shall have unlimited rights (as defined in the "Rights in Data--General" clause contained in this contract) in and to the technical data contained in the proposal dated **March 8, 2004** upon which this contract is based.

I.10 SUBCONTRACTS (FAR 52.244-2) (AUG 1998) (ALTERNATE I) (AUG 1998)

(a) Definitions. As used in this clause--

"Approved purchasing system" means a Contractor's purchasing system that has been reviewed and approved in accordance with Part 44 of the Federal Acquisition Regulation (FAR).

"Consent to subcontract" means the Contracting Officer's written consent for the Contractor to enter into a particular subcontract.

"Subcontract" means any contract, as defined in FAR Subpart 2.1, entered into by a subcontractor to furnish supplies or services for performance of the prime contract or a subcontract. It includes, but is not limited to, purchase orders, and changes and modifications to purchase orders.

(b) This clause does not apply to subcontracts for special test equipment when the contract contains the clause at FAR 52.245-18, Special Test Equipment.

(c) When this clause is included in a fixed-price type contract,
consent to subcontract is required only on unpriced contract actions (including unpriced modifications or unpriced delivery orders), and only if required in accordance with paragraph (d) or (e) of this clause.

(d) If the Contractor does not have an approved purchasing system, consent to subcontract is required for any subcontract that--

(1) Is of the cost-reimbursement, time-and-materials, or labor-hour type; or

(2) Is fixed-price and exceeds--

(i) For a contract awarded by the Department of Defense, the Coast Guard, or the National Aeronautics and Space Administration, the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of the contract; or

(ii) For a contract awarded by a civilian agency other than the Coast Guard and the National Aeronautics and Space Administration, either the simplified acquisition threshold or 5 percent of the total estimated cost of the contract.

(e) If the Contractor has an approved purchasing system, the Contractor nevertheless shall obtain the Contracting Officer's
written consent before placing the following subcontracts:

_____

_____

_____

(f)(1) The Contractor shall notify the Contracting Officer reasonably in advance of placing any subcontract or modification thereof for which consent is required under paragraph (c), (d), or (e) of this clause, including the following information:

(i) A description of the supplies or services to be subcontracted.

(ii) Identification of the type of subcontract to be used.

(iii) Identification of the proposed subcontractor.

(iv) The proposed subcontract price.

(v) The subcontractor's current, complete, and accurate cost or pricing data and Certificate of Current Cost or Pricing Data, if required by other contract provisions.

(vi) The subcontractor's Disclosure Statement or Certificate relating to Cost Accounting Standards when such data are required by other provisions of this contract.

(vii) A negotiation memorandum reflecting--

(A) The principal elements of the subcontract price negotiations;

(B) The most significant considerations controlling establishment of initial or revised prices;

(C) The reason cost or pricing data were or were not required;

(D) The extent, if any, to which the Contractor did not rely on the subcontractor's cost or pricing data in determining the price objective and in negotiating the final price;

(E) The extent to which it was recognized in the negotiation that the subcontractor's cost or pricing data were not accurate, complete, or current; the action taken by the Contractor and the subcontractor; and the effect of any such defective data on the total price negotiated;

(F) The reasons for any significant difference between the Contractor's price objective and the price negotiated; and

(G) A complete explanation of the incentive fee or profit plan when incentives are used. The explanation shall identify each critical performance element, management decisions used to quantify each incentive element, reasons for the incentives, and a summary of all trade-off possibilities considered.

(2) If the Contractor has an approved purchasing system and consent is not required under paragraph (c), (d), or (e) of this clause, the Contractor nevertheless shall notify the Contracting Officer reasonably in advance of entering into any (i) cost-plus-fixed-fee subcontract, or (ii) fixed-price subcontract that exceeds the greater of the simplified acquisition threshold or 5 percent of the total estimated cost of this contract. The notification shall include the information required by paragraphs (f)(1)(i) through (f)(1)(iv) of this clause.

(g) Unless the consent or approval specifically provides otherwise, neither consent by the Contracting Officer to any subcontract nor approval of the Contractor's purchasing system shall constitute a determination--

(1) Of the acceptability of any subcontract terms or conditions;

(2) Of the allowability of any cost under this contract; or

(3) To relieve the Contractor of any responsibility for performing this contract.

(h) No subcontract or modification thereof placed under this contract shall provide for payment on a cost-plus-a-percentage-of-cost basis, and any fee payable under cost-reimbursement type subcontracts shall not exceed the fee limitations in FAR 15.404-4(c)(4)(i).

(i) The Contractor shall give the Contracting Officer immediate written notice of any action or suit filed and prompt notice of any claim made against the Contractor by any subcontractor or vendor that, in the opinion of the Contractor, may result in litigation related in any way to this contract, with respect to which the Contractor may be entitled to reimbursement from the Government.

(j) The Government reserves the right to review the Contractor's purchasing system as set forth in FAR Subpart 44.3.

(k) Paragraphs (d) and (f) of this clause do not apply to the following subcontracts, which were evaluated during negotiations:

_____

_____

_____

I.11 CLAUSES INCORPORATED BY REFERENCE (FAR 52.252-2)
(FEB 1998)

This contract incorporates one or more clauses by reference, with the same force and effect as if they were given in full text. Upon request, the Contracting Officer will make their full text available. Also, the full text of a clause may be accessed electronically at this/these address(es):

_____http://www.arnet.gov/far/_____

____http://www.hq.nasa.gov/office/procurement/regs/nfstoc.htm___

I.12 AUTHORIZED DEVIATIONS IN CLAUSES (FAR 52.252-6) (APR 1984)

(a) The use in this solicitation or contract of any Federal Acquisition Regulation (48 CFR Chapter 1) clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the date of the clause.

(b) The use in this solicitation or contract of any _____ (48 CFR Chapter _____ clause with an authorized deviation is indicated by the addition of "(DEVIATION)" after the name of the regulation.

I.13 OMBUDSMAN (NFS 1852.215-84) (JUN 2000) (ALTERNATE I)
(JUN 2000)

(a) An ombudsman has been appointed to hear and facilitate the resolution of concerns from offerors, potential offerors, and contractors during the preaward and postaward phases of this acquisition. When requested, the ombudsman will maintain strict confidentiality as to the source of the concern. The existence of the ombudsman is not to diminish the authority of the contracting officer, the Source Evaluation Board, or the selection official. Further, the ombudsman does not participate in the evaluation of proposals, the source selection process, or the adjudication of formal contract disputes. Therefore, before consulting with an ombudsman, interested parties must first address their concerns, issues, disagreements, and/or recommendations to the contracting officer for resolution.

(b) If resolution cannot be made by the contracting officer, interested parties may contact the installation ombudsman, Christine Darden, direct inquires to Panice H. Clark, NASA Langley Research Center, Mail Stop 134, Hampton, VA 23681-2199; phone (757) 864-2522; facsimile (757) 864-8541; email p.h.clark@larc.nasa.gov.

Concerns, issues, disagreements, and recommendations which cannot be resolved at the installation may be referred to the NASA ombudsman, the Director of the Contract Management Division, at 202-358-0477, facsimile 202-358-3083, e-mail Anne.C.Guenther@hq.nasa.gov. Please do not contact the ombudsman to request copies of the solicitation, verify offer due date, or clarify technical requirements. Such inquiries shall be directed to the contracting officer or as specified elsewhere in this document.

(c) If this is a task or delivery order contract, the ombudsman shall review complaints from contractors and ensure they are afforded a fair opportunity to be considered, consistent with the procedures of the contract.

I.14 SMALL BUSINESS SUBCONTRACTING REPORTING (NFS 1852.219-75) (MAY 1999)

(a) The Contractor shall submit the Summary Subcontract Report (Standard Form (SF) 295) semiannually for the reporting periods specified in block 4 of the form. All other instructions for SF 295 remain in effect.

(b) The Contractor shall include this clause in all subcontracts that include the clause at FAR 52.219-9.

PART III - LIST OF DOCUMENTS, EXHIBITS AND OTHER ATTACHMENTS

SECTION J - LIST OF ATTACHMENTS

J.1 CONTRACT DOCUMENTATION REQUIREMENTS

Exhibit A	Contract Documentation Requirements
Exhibit B	Safety and Health Plan

EXHIBIT A - CONTRACT DOCUMENTATION REQUIREMENTS

A. Monthly Financial Management Report

1. The Contractor shall submit a monthly financial management report as provided by the Section G clause entitled "NASA Financial Management Reporting." This report shall be submitted utilizing NASA Form 533M, Monthly Contractor Financial Management Report, in accordance with submission instructions contained on the reverse side of the form.

2. For this task order contract, a 533M shall be provided for the levels indicated below:

a. Each Authorized Task

b. Contract Total. (Column 9b shall reflect total estimated cost of $# plus fixed fee of $#.)

c. Due not later than the 10th operating day following the close of the Contractor's accounting period being reported.

d. Each NF533M shall include a narrative explanation for variances exceeding +-5 percent between estimated dollars shown in the prior month and actual dollars shown in the current month at the total contract level. (For example, the estimated dollars shown for June in column 8a. in the May 533M and the actual June dollars shown in column 7a. in the June 533M.)

3. The following minimum reporting categories shall be included in column 6 of this report.

Minimum reporting categories shall include:

a. Direct Labor Hours

b. Direct Labor Dollars

c. Overhead(s)

d. Subcontract

e. Material

f. Other Direct Cost

g. G&A

h. Total Estimated Cost

i. Fee

j. Total Estimated Cost and Fee

B. Monthly Technical Letter Progress Report -- The Contractor shall submit monthly technical letter reports for each task order describing progress of the task to date, noting all technical areas in which effort is being directed and indicating the status of work within these areas. Tasks may be summarized in one letter report, unless otherwise stipulated in individual task orders. Reports shall be in narrative form, brief and informal in content. These reports shall include:

1. A narrative statement of work accomplished during the report period.

2. A statement of current and potential problem areas and proposed corrective action.

3. A discussion of work to be performed during the next report period.

The monthly progress report shall be submitted within 10 days after the end of each calendar monthly report period. A monthly report shall not be required for the period in which the final report is due.

C. Final Reports -- Each task order may require the Contractor to submit a final report, either formal or informal, which documents and summarizes the results. When a formal final Contractor report is required, it shall be submitted in accordance with the instructions contained in NASA FAR Supplement clause 1852.235-73, Final Scientific and Technical Reports. The specified number of approval copies shall be submitted within the time specified in the task orders.

D. Property in the Custody of Contractors (NASA FORM 1018) -- The Contractor shall submit the NASA Form 1018 no later than October 15th of each year in accordance with the Section G clause entitled "Financial Reporting of NASA Property in the Custody of Contractors."

E. Subcontracting Reports [Applicable to Large Businesses Only]

a. The Contractor shall submit Standard Form 294, Subcontracting Report for Individual Contracts, and Standard Form 295, Summary Subcontractor Report, in accordance with the instructions on the reverse of the forms.

In addition to the instructions on the reverse of the SF 295, the Contractor is required to comply with NFS Clause 1852.219-75, Small Business Subcontracting Reporting.

b. The Contractor shall submit an SDB Participation Report in accordance with the Section I FAR Clause 52.219-25, Small Disadvantaged Business Program -- Disadvantaged Status and Reporting. This report shall be submitted within 30 days after the end of each contract year.

F. Quality Plan -- Within 30 calendar days after the effective date of the contract, the Contractor shall submit a quality plan that addresses how the contract quality requirements will be met. The plan and subsequent revisions will be reviewed and approved by the Contracting Officer or the designated representative.

G. Quality System Documents (ISO 9001) -- The Contractor shall submit the following ISO-compliant documents in accordance with H.9 no later than nine months from the effective date of contract:

1. Quality System Manual

2. Quality System Procedures - These procedures shall address:
(1) contract and subcontract management, (2) customer requirement review and execution, (3) task management, including work order generation and processing, (4) document control, (5) handling of customer supplied product, (6) corrective, preventive, and continuing improvement action systems, (7) training of employees, and(8) customer satisfaction/performance measurement.

H. Federal Contractor Veterans Employment Report -- In compliance with Clause 52.222-37, Employment Reports on Disabled Veterans and Veterans of the Vietnam Era, the Contractor shall submit the Federal Contractor Veterans Employment Reports (VETS-100) as required by this clause.

[Paragraphs J, K, and L are applicable to large businesses]

J. Interim New Technology report - After the first anniversary date of the contract, the Contractor shall submit an annual list of subject inventions, certify that all subject inventions have been disclosed (or that there are no such inventions), and certify that the procedures required by paragraph (e)(1) of the New Technology clause have been followed as set forth in NFS 1852.227-70. This report is due by March 31 of each year.

K. Final New Technology report - The Contractor shall submit a list of subject inventions or certify that there were no such subject inventions, and list all subcontracts at any tier containing a patent rights clause or certify that there were no such subcontracts as set forth in NFS 1852.227-70. This report is due within 3 months after completion of the contracted work.

L. Invention disclosure reporting - The Contractor shall disclose each subject invention under the contract as set forth in NFS 1852.227-70. The electronic or paper version of NASA Form 1679, Disclosure of Invention and New Technology (Including Software) may be used for this reporting. Both the electronic and paper versions of this form may be accessed at http://invention.nasa.gov. Disclosures are required within two months after the inventor discloses it in writing to Contractor personnel who are responsible for the administration of the New Technology clause.

[Paragraphs M, N, and O are applicable to small businesses and nonprofit organizations]

M. Interim patent rights report - After the first anniversary date of the contract, the Contractor shall submit an annual list of all subject inventions to be disclosed as set forth in FAR 52.227-11 (as modified by 1852.227-11). This report is due by March 31 of each year.

N. Final patent rights report - The Contractor shall submit a listing of all subject inventions or certify that there were none as set forth in FAR 52.227-11 (as modified by 1852.227-11). This report is due prior to contract closeout.

O. Invention disclosure reporting - The Contractor shall disclose each subject invention under the contract as set forth in FAR 52.227-11 (as modified by 1852.227-11). The electronic or paper version of NASA Form 1679, Disclosure of Invention and New Technology (Including Software) may be used for this reporting. Both the electronic and paper versions of this form may be accessed at http://invention.nasa.gov. Disclosures are required within two months after the inventor discloses it in writing to Contractor personnel who are responsible for patent matters.

II. DOCUMENT DISTRIBUTION REQUIREMENTS

A. Unless otherwise specified elsewhere in this contract, reports and other documentation shall be submitted F.O.B. destination as specified below, addressed as follows:

National Aeronautics and Space Administration
Langley Research Center
Attn: Tianda M. Sherrell, Mail Stop 126
Contract - TBD
Hampton, VA 23681-2199

B. The following letter codes designate the recipients of reports and other documentation which are required to be delivered prepaid to Langley Research Center by the Contractor:
1. A--Contract Specialist, Mail Stop 126

2. B--Contracting Officer Technical Representative, Mail Stop 188E

3. C--New Technology Representative, Mail Stop 212

4. D--Cost Accounting, NF533@nasa.gov

5. G--Office of Chief Financial Officer, Mail Stop 104

6. H--Patent Counsel, Mail Stop 212

7. I---Industrial Property Office, Mail Stop 377

8. J--Small Business Specialist, Mail Stop 134

9. L--According to instructions on form

10. M--As required by Task Order

11. N--Task Monitor

12. O--Langley Management System Project Office, Mail Stop 438

13. P-- Center STI Publication Manager, Mail Stop 196

14. Q-- Industry Assistance Representative, Mail Stop 144

C. The following are the distribution requirements for reports and other documentation required to be delivered f.o.b. destination. The numeral following the letter code specifying the number of copies to be provided:

LETTER CODE AND DOCUMENT: DISTRIBUTION

1. Financial Management Report (NASA Forms 533M): A-1, B-2, D-2, G-1

2. Monthly Technical Letter Progress Report: A-1, B-2, M-1, N-1

3. New Technology/Patent Report: A-1, B-1, C-1, H-1

4. Invention Disclosure Report: A-1, B-1, C-1, H-1

5. Report of Property in the Custody of Contractors (NASA Form 1018): I

6. Subcontracting Report for Individual Contracts (Standard Form 294) and SDB Participation Report (Optional Form 312): A-1, J-1, Q-1, L

7. Summary Subcontractor Report (Standard Form 295): L

8. Federal Contractor Veterans Employment Report (VETS-100): L

9. Quality Plan: A-1, B-1, O-1

10. Quality System Documents: A-1, B-1, O-1

11. Informal Final Report: A-1, B-2, C-1, H-1,

12. Formal Final Report: As specified by the Contracting Officer

13. Copy of formal final report cover letter: P-1

D. When the Contract Specialist (A) is not designated above to receive a copy of a report or document, the Contractor shall furnish a copy of the report/document transmittal letter to the Contract Specialist. If delegated, the Contractor shall also furnish a copy of the transmittal letter and a copy of each Financial Management Report to the delegated Administrative Contracting Officer of the cognizant DoD (or other agency) contract administrative services component.